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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,832	03/15/2007	Michael Hilditch	PROT0104PUSA	7433
22045	7590	09/01/2009	EXAMINER	
BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075			WILBUR, NICHOLAS A	
ART UNIT		PAPER NUMBER		3672
MAIL DATE		DELIVERY MODE		09/01/2009 PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/595,832	HILDITCH ET AL.
	Examiner	Art Unit
	NICHOLAS A. WILBUR	3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 15 May 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-26 is/are pending in the application.
 4a) Of the above claim(s) 17-26 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-16 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) 1-26 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 15 May 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 07/28/2006.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of claims 1-16 in the reply filed on 06/26/2009 is acknowledged. Claims 17-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 06/26/2009.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference characters L, W, 1a, 8, 10b, 12a, 30, 32, and 35 are found in the specification but are not found in the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the

figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: The disclosure lists US Patents with decimal points (e.g. page 1, line 12). In US practice, US Patent numbers are listed with commas instead of decimal points (e.g. US 4,676,696).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 4 and 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, line 3 states the word “preferably” which renders the claim indefinite as it is unclear whether or not the vessel crane must have a heave compensator.

Regarding claim 9, line 8 states the word “preferably” which renders the claim indefinite as it is unclear whether or not the lock pin must be spring loaded.

Regarding claim 9, the limitation “said frame-work” renders the claim indefinite because this term lacks proper antecedent basis in the claims.

Regarding claim 10, the limitations “said vessel wire system” and "said vessel crane or vessel winch" render the claim indefinite because these terms lack proper antecedent basis in the claims.

Regarding claim 11, the limitations “said process subsea skid” and "said transport frame" render the claim indefinite because these terms lack proper antecedent basis in the claims.

Regarding claim 11, line 6 contains the word "preferably" which renders the claim indefinite as it is unclear whether or not there must be two pairs of wedges.

Regarding claim 12, the limitation “said wire system” renders the claim indefinite because this term lacks proper antecedent basis in the claims.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-10, 12-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koch (US 4,486,123) in view of Laursen (US 4,676,696).

Regarding claim 1, Koch discloses a method for the installation of an elongate process unit (6) on the seabed, where the process unit has a first end and a second end (as shown in Figure 1), comprising preparing and moving the process unit to a position to be ready to be launched from the vessel in a generally vertical orientation (as shown in Figure 1), and launching the process unit from the vessel (see column 2, lines 36-44), lowering the unit to the seabed (as shown in Figure 1).

Koch fails to disclose wherein there is a receptor device located on the seabed, or deploying the process unit from a vertical orientation to a horizontal orientation.

However, Laursen discloses a receptor device (as shown in Figure 1) for a process unit (1) that is located on the seabed (see column 1, line 64), that deploys the process unit from a vertical orientation to a horizontal orientation (as shown in Figures 3, 10, and 11).

Regarding claim 2, Laursen further discloses wherein the process unit is guided until it meets the receptor device before the device is attached to the unit (as shown in Figure 1).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method of installing an elongate process unit of Koch to include the receptor device of Laursen in order to ensure that less damage is done to the unit during placement, instead of letting the elongate unit just hit the sea floor and bend until it is laid horizontally will do much more damage than inserting the unit into a receptor, and having the receptor pivot to a 90 degree angle to allow the horizontal placement on the seabed.

Regarding claim 3, Koch further discloses moving and guiding the process unit toward the stern end of the vessel (as shown in Figure 1), and launching the first end of the process unit over a stern roller (23, as shown in Figure 5) located at the stern of the vessel.

Regarding claim 4, Koch further discloses using a vessel crane (9) and vessel wire system (27) to safely guide the process unit (as shown in Figure 1).

Regarding claim 5, Koch and Laursen disclose all the steps of the method of claim 5, except for wherein the receptor device is located on the vessel and not already at the subsea location.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to change the location of the receptor device, because the method as claimed has the same functionality as the method taught by Koch and Laursen (see rejection for claim 1). Koch and Laursen contain all the method steps to perform this function, and it would have been obvious to try relocating the receptor device to allow for easier insertion of the process unit.

Regarding claim 6, Koch further discloses transferring the process unit from a transport frame (21) to a vessel deck (as shown in Figure 3).

Regarding claim 7, Laursen further discloses wherein the first process unit end (1) has mating pins (14) to engage the process unit with the receptor device (see Figures 1 and 2).

Regarding claim 8, Koch further discloses having two launch beams (15) for guiding the process unit into the sea (as shown in Figure 1), and providing support for the process unit onto the seabed.

Regarding claim 9, Laursen further discloses wherein there is a lock pin (13) included on the end of the process unit to lock in place and keep the mating pins in place (as shown in Figure 2).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify the method of Koch and Laursen to include the mating pins and lock pins of Laursen in order to permit the process unit to be easily hinged to a horizontal position on the seabed (see column 2, lines 36-42 of Laursen).

Regarding claim 10, Koch further discloses keeping control of the process unit during lowering by use of a vessel wire system (27) from a vessel crane (9), and where the weight of the process unit is gradually transferred to a lowering wire (27), and Laursen further discloses moving and positioning the vessel directly above the receptor device, and lowering the process unit vertically into the receptor device (as shown in Figure 1).

It is noted that the references are silent to the axial force component of the tension generated by the process unit being directed towards the receptor device, however it would have been obvious to a person having ordinary skill in the art that the amount of axial force would be reduced by the method taught by Koch and Laursen because of the substantially vertical installation of the process unit into the receptor device.

Regarding claim 12, Koch further discloses that the wire system includes a launch wire (lower wire 27) extending from the vessel crane (9) via a snatch block (4) located on the stern end of the vessel (as shown in Figure 1), also a launch-control wire (middle wire 27) and a lowering wire (top wire 27), and are all connected to a different winch (see winch in Figure 1, directly above reference character 2).

Regarding claim 13, Laursen further discloses wherein the receptor device is removed from the process unit end after use (after being moved from vertical to horizontal position, the process unit is connected to manifold 16, see column 2 lines 59-68 and column 3 lines 1-9).

Regarding claim 14, the combination of Koch and Laursen fail to disclose wherein the process unit is a horizontal gravitational separator, but the method for installing a process unit of Koch and Laursen would function the same way no matter what the process unit was, be it a pipe, tank, vessel, or gravitational separator. Therefore, there is no criticality set forth by the Applicant of this certain type of process unit having any effect on the method as claimed, so it is found to be an obvious variant of the method of Koch and Laursen.

Regarding claim 16, the combination of Koch and Laursen disclose all the elements of the method of placing the elongate process unit on the seabed, therefore it

is considered to be obvious to one having only routine skill in the art to know how to reverse this process and retrieve the elongate process unit from the seabed.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koch and Laursen, as applied to claim 1, and further in view of Pattison (US 3,690,112).

Regarding claim 11, Koch and Laursen fail to disclose wherein there is a subsea skid placed on the seabed to support and guide the process unit, or wherein the process unit has a saddle to engage the subsea skid.

However, Pattison discloses a method for installing process units in the sea that uses a subsea skid (pipe guide 26) to guide the process unit and support it on the seabed. Pattison also discloses wherein the bottom of the process unit (27) engages the subsea skid and transfers the load to the skid (as shown in Figure 3).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method of Koch and Laursen to include the subsea skid of Pattison in order to hold the process unit in place while also protecting it from being damaged (see column 2, lines 8-24 of Pattison).

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koch and Laursen, as applied to claim 1, and further in view of Coblenz (US 6,375,407).

Regarding claim 15, Koch and Laursen fail to disclose the preliminary step of placing the process unit and receptor device on a flatbed truck, and then transferring the receptor and process unit to the vessel by lifting them onto the vessel.

However, Coblenz discloses that is known in the art to transport cargo on a flatbed truck to the side of a vessel ship, and then unload the truck by lifting the cargo onto the vessel (as shown in Figure 1).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method of Koch and Laursen to include the preliminary step of lifting the devices from a flatbed truck of Coblenz because it is a well-known way of transferring cargo and materials to vessels.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wilkins (US 5,464,307) for a method for vertical installation of a process unit.

Howard (US 3,641,961) for a method for vertical installation of a process unit.

Baugh (US 6,273,643) for a method for vertical installation of a process unit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICHOLAS A. WILBUR whose telephone number is (571)270-5746. The examiner can normally be reached on Monday-Friday 7:30 AM- 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571)272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David J. Bagnell/
Supervisory Patent Examiner, Art Unit 3672

NW
08/28/2009